



Healthy Soils for Sustainable Cotton

Field Day



IMPROVING SOIL HEALTH THROUGH A SYSTEMS APPROACH

FIELD DAY AGENDA

Halifax County Agriculture Center
359 Ferrell Lane, Halifax, NC
Tuesday, August 20, 2019

| | Time | Speaker |
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| Welcome and Overview of Activities (Board bus from Halifax County Agriculture Center to Zeb Winslow Farm) | 8:00 a.m. – 8:30 a.m. | |
| Soil Health Farmer Mentor: Zeb Winslow 1. Overview of Soil Health Management System a. How long? b. Equipment used? c. Acres farmed? | 9:00 a.m. – 9:30 a.m. | Zeb Winslow Farmer Mentor |
| DEMONSTRATIONS | | |
| Rain Fall Simulator 1. Impacts of management on soil function 2. Soil Health Management Principles a. Minimize disturbance b. Maximize diversity c. Keep living roots growing d. Maintain residue cover | 9:30 a.m. – 10:00 a.m. | Nathan Lowder NRCS Soil Health Specialist |
| Stop 1 Adapting Equipment for Soil Health (discuss adjustments and challenges with equipment when moving into a soil health system) 1. Spreading residue during harvest 2. Seeding cover crops, e.g. drilling, broadcasting, aerial application 3. Terminating cover crops, e.g. when & how 4. Planting into high residue levels 5. Sprayer tips | 10:00 a.m. – 10:30 a.m. | Zeb Winslow Farmer Mentor |

| Cotton Field Day Agenda <i>continued</i> | Time | Speaker |
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| Stop 2 Cover Crops used in Cotton Systems <ol style="list-style-type: none"> 1. Moisture management 2. Moderating soil temperatures 3. Nutrient cycling 4. Pest management 5. Results of testing from Zeb's fields | 10:30 a.m. – 11:00 a.m. | Will Mann Fishing Creek SWCD Resource Conservationist |
| Stop 3 Linking Soil Biology to Soil Health <ol style="list-style-type: none"> 1. Soil health indicators used to evaluate soil health in the field 2. Linking key soil health indicators to the soil health principles and soil function 3. Soil functions performed by soil organisms 4. Three broad functional groups for soil organisms 5. Identify and define biological hot spots in soil and key organisms in each zone/sphere | 11:00 a.m. – 11:30 a.m. | David Lamm SHI Project Manager Nathan Lowder NRCS Soil Health Specialist |
| Cotton field in cover crop | 11:30 a.m. – 12:00 noon | |
| Lunch at Halifax County Agriculture Center | 12:00 noon – 1:00 p.m. | |
| Why Soil Health Now? <ol style="list-style-type: none"> 1. Wrangler Jeans and Walmart Foundation involvement 2. 10-Year Cotton Sustainability Goals 3. Cotton Trust Protocol 4. Soil Health Institute | 1:00 p.m. – 1:30 p.m. | David Lamm SHI Project Manager |
| DESIGNING A SOIL HEALTH MANAGEMENT SYSTEM | | |
| Cover Cropping with a Purpose <ol style="list-style-type: none"> 1. Cover crops benefits and impact on soil function 2. Consideration for successful cover crop planning 3. Designing multi-species cover crop mixes 4. Trouble shooting cover crop problems 5. Examples of cover crops in cotton production systems 6. Cover Crop decision tool (SmartMix Calculator) | 1:30 p.m. to 3:00 p.m. | Nathan Lowder NRCS Soil Health Specialist |
| Healthy Soils for Sustainable Cotton Challenge <ol style="list-style-type: none"> 1. Opportunity to commit to a soil health management system in 2 fields: one coming out of cotton and another rotating to cotton 2. Spend the afternoon developing a strategy to implement in the fall. Goal: leave with a cover crop mix to use, seeding method, timing and field prep plan 3. Discuss follow-up meeting in December to cover: <ol style="list-style-type: none"> a. Cover crop termination b. Planting challenges c. Nutrient management d. Pest management | 3:00 p.m. to 3:30 p.m. | David Lamm SHI Project Manager |

